

31 August 2023

MATSA Mineral Resource and Ore Reserve Update

Highlights

- Updated Measured, Indicated and Inferred Mineral Resource estimate for MATSA as at 30 June 2023:
 - Overall Measured, Indicated and Inferred Mineral Resource estimate for MATSA of 157.6Mt at 1.3% Cu, 3.0% Zn, 1.1% Pb and 40.1g/t Ag containing an estimated 2.1Mt of copper, 4.7Mt of zinc, 1.7Mt of lead and 203Moz of silver with an estimated Net Smelter Return (NSR) of US\$121/t1 (using an NSR cut-off).
 - The Mineral Resource estimate comprises 109.6Mt of Polymetallic material at 1.1% Cu and 4.2% Zn and 48.0Mt of Cupriferous and Stockwork material types at a combined grade of 1.7% Cu.
 - Contained mineral resource tonnes have increased by 7% with a 1% decrease in contained copper and a 7% increase in contained zinc since the previous Mineral Resource estimate stated as at 31 December 2021. This broadly replaces mining depletion over the intervening period.
- Updated Proved and Probable Ore Reserve estimate for MATSA as at 30 June 2023:
 - Overall Proved and Probable Ore Reserve estimate for MATSA of 36.0Mt at 1.6% Cu, 2.6% Zn, 0.8% Pb and 36.5g/t Ag containing an estimated 565kt of copper, 930kt of zinc, 284kt of lead and 42.3Moz of silver with an estimated NSR of US\$114/t² (using an NSR cut-off).
 - The Ore Reserve estimate comprises 24.4Mt of Polymetallic material at 1.5% Cu and 3.6% Zn and 11.6Mt of Cupriferous and Stockwork material types at a combined grade of 1.7% Cu.
 - Contained ore tonnes have decreased by 3% with a 5% decrease in contained copper and a 5% decrease in contained zinc since the previous Ore Reserve estimate stated as at 30 April 2022. This broadly replaces mining depletion over the intervening period.
- Our fundamental review and re-interpretation of the MATSA geological model has already led
 to the discovery of the San Pedro zone at Aguas Teñidas, and the Olivo zone at Magdalena,
 with the results of this drilling only partially included in this update. Further drilling programs,
 as well as technical and economic studies have been initiated to test the delineation and
 viability of extracting further Measured and Indicated Mineral Resources and the finalisation
 of these programs and studies are expected to set the basis to further update the MATSA
 Mineral Resource and Ore Reserve estimates in the next reporting cycle.

Sandfire Resources Ltd (**Sandfire** or **the Company**) is pleased to report an updated Mineral Resource and Ore Reserve estimate for our MATSA asset, located in the Iberian Pyrite Belt of Spain.

ABN 55 105 154 185

¹ Refer to the attached MATSA Mineral Resource Statement and Explanatory Notes, Mineral Resource - Section 3 of the JORC 2012 Table 1 for details on the estimation of the Mineral Resource NSR US\$/t value and applied NSR cut-off.

² Refer to the attached MATSA Ore Reserve Statement and Explanatory Notes, Ore Reserve - Section 4 of the JORC 2012 Table 1 for details on the estimation of the Ore Reserve NSR US\$/t value and applied NSR cut-off.



The new Mineral Resource estimate totals 157.6Mt at 1.3% Cu, 3.0% Zn, 1.1% Pb and 40.1g/t Ag containing an estimated 2.1Mt of copper, 4.7Mt of zinc, 1.7Mt of lead and 203.2Moz of silver with an estimated Net Smelter Return (NSR) of US\$121/t (using an NSR cut-off).

The updated Mineral Resource estimate, reported as at 30 June 2023, was completed employing industry best practice and robust NSR methodology utilising independent and highly regarded consultants GeoEstima, with support from Sandfire's technical expertise.

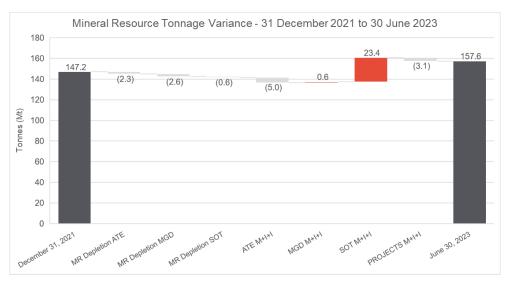


Figure 1 - MATSA Mineral Resource tonnage variance 31 December 2021 to 30 June 2023.

The updated Ore Reserve estimate totals **36.0Mt at 1.6% Cu, 2.6% Zn, 0.8% Pb and 36.5g/t Ag** containing an estimated **565kt of copper, 930kt of zinc, 284kt of lead and 42.3Moz of silver** with an estimated NSR of US\$114/t (using an NSR cut-off).

The updated Ore Reserve estimate, reported as at 30 June 2023, was completed employing industry best practice and robust NSR methodology utilising Sandfire's technical expertise. The MATSA Ore Reserve has been updated based on updated Mineral Resources (as at 30 June 2023) and changes to modifying factors.

This has resulted in a net overall decrease in the MATSA Ore Reserve of 1.1Mt, a decrease of 28kt of contained copper and decrease of 45kt of contained zinc after accounting for annual mining depletion and adjustments to modifying factors.



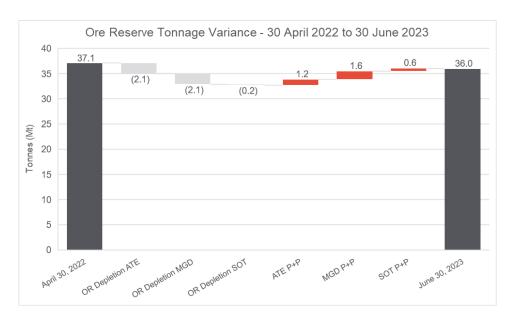


Figure 2 - MATSA Ore Reserve tonnage variance 30 April 2022 to 30 June 2023.

Table 1 shows a summary of the MATSA Mineral Resources (MR) and Ore Reserves (OR) by mine and the increase or decrease from the previous respective declaration statements^{3,4}.

Table 1: Summary of MATSA Mineral Resources and Ore Reserves by Mine as at 30 June 2023

Mine and Category	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (t)	Ag (Moz)	Increase / Decrease
Aguas Teñidas MR	44.0	140	1.4	3.5	1.0	45.6	608	1,552	438	64.5	-7.3Mt
Aguas Teñidas OR	15.5	107	13	3.4	1.0	44.7	197	530	158	22.3	-0.9Mt
Magdalena MR	23.1	204	2.4	2.6	8.0	39.3	555	608	182	29.3	-2.1Mt
Magdalena OR	17.1	128	1.9	2.1	0.6	30.9	321	360	108	17.0	-0.6Mt
Sotiel MR	73.7	90	0.9	3.0	1.3	39.3	678	2,220	950	93.0	+22.7Mt
Sotiel OR	3.4	75	1.4	1.1	0.5	27.5	47	39	17	3.0	+0.4Mt
MATSA Mines MR	140.9	124	1.3	3.1	1.1	41.2	1,841	4,381	1,570	186.8	+13.4Mt
MATSA Mines OR	36.0	114	1.6	2.6	8.0	36.5	565	930	284	42.3	-1.1Mt
Projects MR	16.7	96	1.3	2.0	0.7	30.7	215	326	120	16.5	-3.1Mt
MATSA Cons. MR	157.6	121	1.3	3.0	1.1	40.1	2,056	4,707	1,690	203.2	+10.4Mt

Notes:

- 1. Mineral Resources are inclusive of Ore Reserves.
- Different long term real commodity prices are used to estimate NSR value for Mineral Resources and Ore Reserves. See attached explanatory notes.
- 3. Numbers may not add due to rounding.

The MATSA process plant located next to the Aguas Teñidas mine has a nominal capacity of 4.7Mtpa consisting of three independent processing streams. The mine operating strategy adopted for MATSA is to maximise value by utilising the mill capacity and blending the various plant feed sources to produce the highest value concentrate.

³ Refer to Sandfire's ASX announcement titled '37Mt Ore Reserve cements foundation for long-term growth at Sandfire's MATSA Copper Operations', dated 28 July 2022 for details.

⁴ Refer to Sandfire's ASX announcement titled '147Mt Mineral Resource sets strong foundation for optimisation and long-term growth at MATSA', dated 30 June 2022 for details.



The blending strategy considers the two primary ore types at MATSA, polymetallic and cupriferous, and the variations within those ore types. The in-built system flexibility allows short and longer-term ore feed variability to be managed to achieve objectives. End of mine life production tails can also be effectively managed.

Mill feed sourced from the respective mines is nominally split 45% from Aguas Teñidas (ATE), 45% from Magdalena (MGD) and 10% from Sotiel (SOT).

Technical and economic studies have been initiated to test the viability of extracting unconverted Measured and Indicated Mineral Resources. This work has been undertaken with the understanding that a whole of mine geological remodelling exercise for all MATSA deposits was being undertaken in parallel. Finalisation of such studies will only commence after the reinterpreted geological information is used as the basis to update MATSA's Mineral Resource estimates which is planned as part of the next reporting cycle.

Similarly, the requirement for Measured and Indicated Mineral Resource sterilisation assessments remains and will be undertaken in each respective mine that has remnant areas. Focus areas include the Aguas Teñidas orebody including stockwork at the Aguas Teñidas mine, the Masa 1 orebody at the Magdalena mine, and the Sotiel, Sotiel East and Migollas orebodies at the Sotiel mine.

No Ore Reserves have been declared for the satellite deposits of Concepción, Poderosa and Castillo-Buitrón (included in the Mineral Resource tables above within 'Projects MR') as these only contain Inferred Mineral Resources. Studies will be undertaken to determine the technical and economic viability of these deposits to inform future development potential.

Management Comment

Sandfire's Managing Director and CEO, Brendan Harris, said: "It's pleasing to see the excellent work our geoscientists have underway to improve our geological understanding of the MATSA complex is already generating positive results, with the inclusion of early drill results from the San Pedro Zone⁵ in the Aguas Teñidas Mineral Resource."

"We believe there is enormous untapped potential in the Iberian Pyrite Belt and will continue to prioritise near-mine exploration given its potential to deliver an exceptional return on discretionary investment. An active drilling program is targeting numerous extensions of existing deposits, and we remain confident that our efforts will lead to further growth in our Ore Reserves and mine lives, and contribute to the delivery of one of our five strategic pillars – Increase our Reserves."

- ENDS -

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This announcement is authorised for release by Sandfire's Managing Director and CEO, Brendan Harris.

Competent Person's Statement - Mineral Resources

The information in this report that relates to Mineral Resources is based on and fairly represents information and supporting documentation prepared by Mr Orlando Rojas who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Rojas is a full-time employee of GeoEstima. Mr Rojas has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012

⁵ Refer to Sandfire's ASX announcement titled 'Near-mine exploration Success at MATSA', dated 24 January 2023 for details.



Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Rojas consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Competent Person's Statement - Ore Reserves

The information in this report that relates to Ore Reserves is based on and fairly represents information and supporting documentation compiled by Mr Fabian Augusto Silva Araque and reviewed by Mr Neil Hastings who are both Members of The Australasian Institute of Mining and Metallurgy. Mr Araque and Mr Hastings are full-time employees of Sandfire Resources. Mr Hastings has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves'. Mr Hastings consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Forward-Looking Statements

Certain statements made during or in connection with this release contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Ore Reserves, exploration and project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and no assurance can be given that such expectations will prove to have been correct.

Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management.

Except for statutory liability which cannot be excluded, each of Sandfire, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in these forward-looking statements and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in forward-looking statements or any error or omission. Sandfire undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly, you should not place undue reliance on any forward-looking statement.



MATSA Mineral Resources and Ore Reserves 2023 Statement and Explanatory Notes



Setting

The MATSA operations comprises copper-zinc-lead deposits of three mines: Aguas Teñidas, Magdalena and Sotiel and three Projects, Concepcion, Castillo – Buitron and Poderosa. These deposits are all interpreted as volcanogenic massive sulphide, or VMS, in a well-established mineralised belt known as the Iberian Pyrite Belt (IPB) located in southwest Spain near the international border with Portugal (see Figure 3). MATSA holds 47 exploitation concessions grouped into three mining projects: Aguas Teñidas, Magdalena and Sotiel.

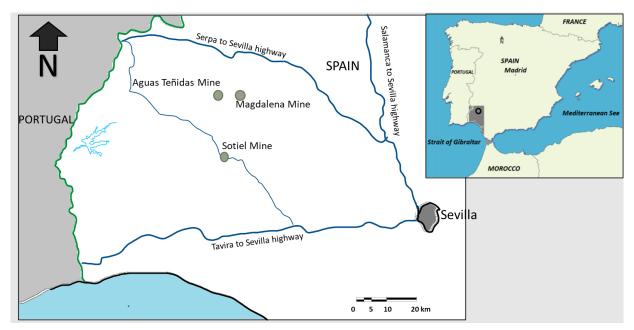


Figure 3: Location of MATSA deposits, south-west Spain.

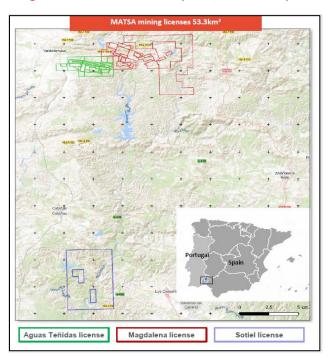


Figure 4: Location of Aguas Teñidas, Magdalena and Sotiel mines.



The three MATSA underground mines are located in relatively close proximity to one another (see Figure 4). The Aguas Teñidas mine is 7km west of the Magdalena mine, within the Almonaster la Real municipality and less than 2km from the villages of Valdelamusa and Cueva de la Mora. The Sotiel mine is located approximately 38km south of the Aguas Teñidas mine within the municipality of Calañas, immediately on the southern border of the village of Sotiel Coronada.

The three MATSA mines are accessed by the national road network which is characterised by well-maintained paved roads. The Aguas Teñidas processing plant and mine are located approximately 100km north from the industrial port city of Huelva.

Mineralisation at all three mines is dominated by massive sulphides, with the dominant sulphide mineral being pyrite with lesser amounts of sphalerite, chalcopyrite and galena. The character of the mineralisation is specific to each mine.

MATSA Mineral Resource

The MATSA Mineral Resource statement is as at 30 June 2023 and includes drillhole data acquired between 1984 and October 2022, and also uses mapping information collected from underground development in its three mines.

The 2023 MATSA Mineral Resource update followed an interpretation approach consistent with that used for previous models for Aguas Teñidas, Magdalena and Sotiel Mines, as well as mineral resources related to three exploration projects.

The mineral resource model of Aguas Teñidas Mine includes the Aguas Teñidas, Western Extension, Calañesa, and Castillejito deposits. The mineral resource model of Magdalena mine includes Masa 1, Masa 2, Masa Gold and Masa Gold Norte deposits, and the mineral resource model of Sotiel Mine includes Sotiel, Sotiel East, Migollas, Calabazar, and Elvira deposits. The projects' mineral resource models include the Concepcion, Castillo – Buitron and Poderosa deposits.

The Reasonable Prospects of Eventual Economic Extraction test uses updated commodity prices for Copper, Zinc, Lead and Silver and recoveries that allow the valuation of blocks based on NSR calculations. NSR cut-offs were applied for each mine assuming the relevant production costs that are applicable in each case. The models have been created, and Mineral Resources classified, assuming the current mining method, namely transverse and longitudinal sub-level, long hole open stoping.

The estimated Mineral Resources at the MATSA asset are shown in Table 2.



Table 2: MATSA Mineral Resources Estimate as at 30 June 2023 by Mine

Deposit	Class	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (kt)	Ag (Moz)
Aguas	Measured	34.4	142	1.4	3.6	1.0	47.2	477	1,230	360	52.2
Teñidas	Indicated	6.5	118	1.2	3.1	8.0	38.2	77	199	49	8.0
	Inferred	3.1	170	1.7	3.9	0.9	42.8	54	123	29	4.3
	Total	44.0	140	1.4	3.5	1.0	45.6	608	1,552	438	64.5
Magdalena	Measured	13.8	230	2.6	3.3	1.0	47.6	365	450	132	21.1
Ü	Indicated	5.0	161	2.0	1.8	0.6	28.0	98	92	28	4.5
	Inferred	4.3	168	2.1	1.5	0.5	26.1	92	66	22	3.6
	Total	23.1	204	2.4	2.6	0.8	39.3	555	608	182	29.3
Sotiel	Measured	44.8	95	1.0	3.2	1.4	40.3	430	1,430	618	58.1
	Indicated	14.8	89	1.0	2.6	1.1	38.6	147	380	157	18.4
	Inferred	14.0	72	0.7	2.9	1.2	36.7	101	410	175	16.6
	Total	73.7	90	0.9	3.0	1.3	39.3	678	2,220	950	93.0
Projects	Measured	-	-	-	-	-	-	-	-	-	-
.,	Indicated	-	-	-	-	-	-	-	-	-	-
	Inferred	16.7	96	1.3	2.0	0.7	30.7	215	326	120	16.5
	Total	16.7	96	1.3	2.0	0.7	30.7	215	326	120	16.5
MATSA	Measured	93.0	133	1.4	3.3	1.2	43.9	1,272	3,111	1,110	131.3
Consolidated	Indicated	26.3	110	1.2	2.6	0.9	36.5	322	672	234	30.9
	Inferred	38.2	102	1.2	2.4	0.9	33.4	463	924	345	41.0
	Total	157.6	121	1.3	3.0	1.1	40.1	2,056	4,707	1,690	203.2

Notes:

- 1. Mineral Resources estimate has been reported in accordance with the 2012 edition of the JORC Code.
- 2. Mineral Resources are reported on a 100% ownership basis.
- 3. Mineral Resources are inclusive of Ore Reserves.
- 4. Mineral Resources that are not Ore Reserves do not have demonstrated economic viability.
- 5. Mineral Resources are estimated at the following NSR cut-off value:
 - a. Magdalena: US\$53/t
 - b. Aguas Teñidas and projects: US\$55/t
 - c. Sotiel: US\$49/t
- 6. Mineral Resources are estimated using the following long-term prices:
 - a. Cu US\$9,761/t
 - b. Zn US\$3,140/t
 - c. Pb US\$2,171/t
 - d. Ag US\$21.97/oz
- Cu recovery for Polymetallic ranged between 40% and 79%, for Cupriferous ranged between 83% and 92% and for Stockwork ranged between 85% and 92%.
- 8. Zn recovery for Polymetallic ranged between 57% and 83%.
- 9. Pb recovery for Polymetallic ranged between 25% and 50%.
- 10. Original statements did not present metal content, these have been derived for the consolidated table only.
- 11. Numbers may not add due to rounding.



Table 3: MATSA Mineral Resources Estimate as at 30 June 2023 by Material Type

Mine	Class	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (kt)	Ag (Moz)
Aguas Teñida	ıs										
	Measured	23.6	151	1.3	5.1	1.5	60.1	296	1,201	348	45.6
5.1	Indicated	4.3	123	1.0	4.5	1.1	51.8	45	196	48	7.2
Polymetallic	Inferred	2.1	194	1.8	5.7	1.3	57.0	37	121	28	3.9
	Total	30.0	150	1.3	5.1	1.4	58.7	377	1,518	424	56.7
	Measured	6.0	149	2.1	0.4	0.2	29.9	126	25	10	5.8
Commitances	Indicated	0.6	146	2.0	0.3	0.1	28.4	12	2	1	0.5
Cupriferous	Inferred	0.3	150	2.1	0.5	0.3	38.3	6	2	1	0.4
	Total	6.9	149	2.1	0.4	0.2	30.1	143	28	12	6.7
	Measured	4.7	87	1.2	0.1	0.0	4.8	55	4	1	0.7
01	Indicated	1.6	96	1.3	0.1	0.0	4.9	21	1	0	0.3
Stockwork	Inferred	0.7	108	1.5	0.0	0.0	4.7	11	0	0	0.1
	Total	7.1	91	1.2	0.1	0.0	4.8	87	6	2	1.1
	Measured	34.4	142	1.4	3.6	1.0	47.2	477	1,230	360	52.2
Tatal	Indicated	6.5	118	1.2	3.1	0.8	38.2	77	199	49	8.0
Total	Inferred	3.1	170	1.7	3.9	0.9	42.8	54	123	29	4.3
	Total	44.0	140	1.4	3.5	1.0	45.6	608	1,552	438	64.5
Magdalena					·	·					
	Measured	6.9	296	3.0	6.3	1.8	82.2	209	437	125	18.3
Polymetallic	Indicated	1.5	228	2.2	5.8	1.6	68.9	34	88	25	3.4
Polymetanic	Inferred	1.1	197	1.9	5.5	1.6	63.3	21	62	18	2.3
	Total	9.6	273	2.8	6.1	1.7	77.9	265	588	167	24.0
	Measured	6.3	172	2.4	0.2	0.1	12.7	149	10	7	2.6
Cupriferous	Indicated	3.4	133	1.9	0.1	0.1	10.0	63	4	3	1.1
Cuprilerous	Inferred	3.2	158	2.2	0.1	0.1	12.9	71	4	4	1.3
	Total	12.8	158	2.2	0.1	0.1	12.0	283	18	14	5.0
	Measured	0.6	86	1.2	0.4	0.2	11.5	7	3	1	0.2
Stockwork	Indicated	0.1	82	1.1	0.3	0.1	10.6	1	0	0	0.0
Stockwork	Inferred							-	-	-	-
	Total	0.7	85	1.2	0.4	0.2	11.4	8	3	1	0.3
	Measured	13.8	230	2.6	3.3	1.0	47.6	365	450	132	21.1
Total	Indicated	5.0	161	2.0	1.8	0.6	28.0	98	92	28	4.5
Total	Inferred	4.3	168	2.1	1.5	0.5	26.1	92	66	22	3.6
	Total	23.1	204	2.4	2.6	0.8	39.3	555	608	182	29.3
Sotiel											
	Measured	39.1	87	8.0	3.6	1.5	41.3	317	1,397	601	51.9
Polymetallic	Indicated	10.9	85	0.9	3.4	1.4	42.0	94	366	148	14.7
Folymetanic	Inferred	13.4	71	0.7	3.0	1.3	37.1	94	407	171	16.0
	Total	63.4	83	0.8	3.4	1.5	40.5	505	2,170	920	82.6
	Measured	5.7	152	2.0	0.6	0.3	33.1	113	34	18	6.1
Cupriferous	Indicated	4.0	101	1.3	0.4	0.2	29.3	53	14	9	3.7
Cupilierous	Inferred	0.6	85	1.1	0.4	0.5	28.5	7	2	3	0.6
	Total	10.3	128	1.7	0.5	0.3	31.4	172	50	30	10.4
	Measured	-	-	-	-	-	-	-	-	-	
Stockwork	Indicated	-	-	-	-	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-	-	-	-	-



Mine	Class	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (kt)	Ag (Moz)
	Total	-	-	-	-	-	-	-	-	-	-
	Measured	44.8	95	1.0	3.2	1.4	40.3	430	1,430	618	58.1
Total	Indicated	14.8	89	1.0	2.6	1.1	38.6	147	380	157	18.4
Total	Inferred	14.0	72	0.7	2.9	1.2	36.7	101	410	175	16.6
	Total	73.7	90	0.9	3.0	1.3	39.3	678	2,220	950	93.0
Projects											
	Measured	-	-	-	-	-	-	-	-	-	-
Polymetallic	Indicated	-	-	-	-	-	-	-	-	-	-
Polymetanic	Inferred	6.5	107	1.1	4.5	1.7	59.6	73	294	110	12.5
	Total	6.5	107	1.1	4.5	1.7	59.6	73	294	110	12.5
	Measured	-	-	-	-	-	-	-	-	-	-
Cupriforous	Indicated	-	-	-	-	-	-	-	-	-	-
Cupriferous	Inferred	7.8	92	1.5	0.4	0.1	14.3	116	29	10	3.6
	Total	7.8	92	1.5	0.4	0.1	14.3	116	29	10	3.6
	Measured	-	-	-	-	-	-	-	-	-	-
Ctaalawank	Indicated	-	-	-	-	-	-	-	-	-	-
Stockwork	Inferred	2.3	81	1.1	0.1	0.0	4.3	26	3	1	0.3
	Total	2.3	81	1.1	0.1	0.0	4.3	26	3	1	0.3
	Measured	-	-	-	-	-	-	-	-	-	-
Total	Indicated	-	-	-	-	-	-	-	-	-	-
Total	Inferred	16.7	96	1.3	2.0	0.7	30.7	215	326	120	16.5
	Total	16.7	96	1.3	2.0	0.7	30.7	215	326	120	16.5
MATSA Cons	olidated										
	Measured	69.6	130	1.2	4.4	1.5	51.8	822	3,035	1,073	115.9
Polymetallic	Indicated	16.7	108	1.0	3.9	1.3	47.0	172	650	221	25.3
Polymetanic	Inferred	23.2	99	1.0	3.8	1.4	46.5	226	885	327	34.7
	Total	109.6	120	1.1	4.2	1.5	49.9	1,221	4,570	1,621	175.9
	Measured	18.0	158	2.1	0.4	0.2	25.0	387	69	35	14.5
Cupriferous	Indicated	7.9	118	1.6	0.3	0.2	21.0	127	20	13	5.3
Cuprilerous	Inferred	11.9	111	1.7	0.3	0.1	15.3	200	36	18	5.9
	Total	37.9	135	1.9	0.3	0.2	21.1	715	125	65	25.7
	Measured	5.4	86	1.2	0.1	0.0	5.6	62	7	2	1.0
Stockwork	Indicated	1.7	95	1.3	0.1	0.0	5.2	22	1	1	0.3
SLOCKWOLK	Inferred	3.1	88	1.2	0.1	0.0	4.4	36	3	1	0.4
	Total	10.1	88	1.2	0.1	0.0	5.1	121	11	4	1.7
Total	Measured	93.0	133	1.4	3.3	1.2	43.9	1,272	3,111	1,110	131.3
	Indicated	26.3	110	1.2	2.6	0.9	36.5	322	672	234	30.9
	Inferred	38.2	102	1.2	2.4	0.9	33.4	463	924	345	41.0
	Total	157.6	121	1.3	3.0	1.1	40.1	2,056	4,707	1,690	203.2

When compared with the previous Mineral Resource estimate reported as at 31 December 2021, the updated 30 June 2023 Mineral Resource provides a 7% increase in contained tonnes, a 1% decrease in contained copper and a 7% increase in contained zinc. This result broadly replaces mineral resource mining depletion over the intervening period.



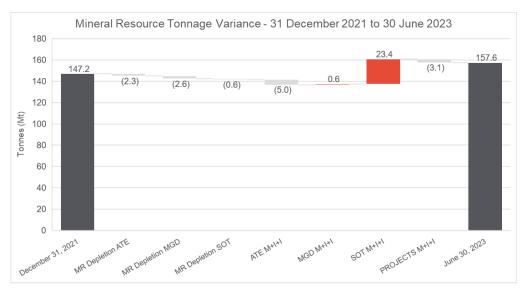


Figure 5: MATSA Mineral Resource tonnage variance - 31 December 2021 to 30 June 2023.

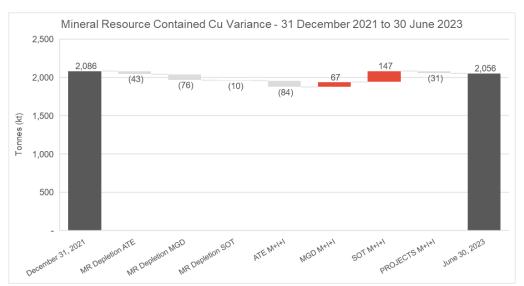


Figure 6: MATSA Mineral Resource contained copper variance – 31 December 2021 to 30 June 2023.

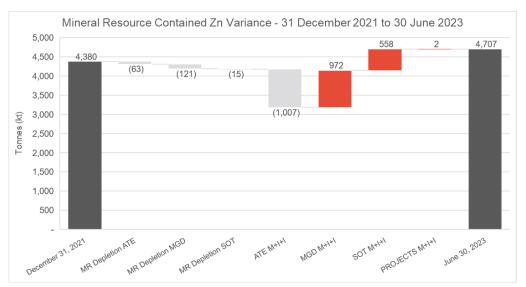


Figure 7: MATSA Mineral Resource contained zinc variance - 31 December 2021 to 30 June 2023.



MATSA Ore Reserve

The reported Ore Reserves for the Aguas Teñidas, Magdalena and Sotiel operations are based on the 10 block models which formed the basis of the Mineral Resource estimates.

The effective date of the Mineral Resource statement is 30 June 2023, with the effective date of the previous Ore Reserve statement being 30 April 2022. Mineral Resources and Ore Reserves incorporated depletion by MATSA up to 30 June 2023. Mineral Resources are presented on an inclusive basis, meaning the Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

Material type classification is determined by the requirements of the process plant to produce concentrates containing certain quality characteristics. Cupriferous ore is defined as Zn<2.5% and Cu/Zn>1.7 with the remainder defined as Polymetallic ore.

Estimation of the Ore Reserve adopts the same NSR methodology that is used in the estimation of the Mineral Resource with the only difference being the selected commodity prices. An NSR cut-off value approach is applied for each stope or development block, with each value calculated according to the ore type, metal grades, metallurgical recoveries, realisation costs, transport costs, forecast metal prices and the payability of each metal according to offtake agreements. For the Ore Reserve estimate various NSR cut-off values (development incremental through to full cost) were used dependent on the status of development access.

- Long term real commodity prices: Cu US\$8,100/t, Zn US\$2,500/t, Pb US\$1,938/t, Ag US\$19.10/oz.
- Exchange rate: EUR/US\$1.19.
- Process plant recoveries are estimated from material type grade recovery curves and applied by mine, material type and concentrate product:
 - Polymetallic: Aguas Teñidas and Magdalena Zn (67-83%), Cu (50-79%), Pb (25-50%)
 - Polymetallic: Sotiel Zn (57-71%), Cu (40-75%), Pb (25-36%)
 - o Copper: Aguas Teñidas, Magdalena, Sotiel Cu (83-92%)
 - Copper stockwork: Aguas Teñidas and Magdalena Cu (85-92%).
- Metal payability, penalties, realisation costs, shipping costs are based on current offtake agreements for the various concentrates.
- Mine to port logistic costs are based on current road transport contract pricing.

The primary NSR cut-off values used for the Ore Reserve estimate are shown in Table 4.



Table 4: Ore Reserve Cut-Off Values

Mine	Incremental COV (US\$/t ore)	Opex COV (US\$/t ore)	Opex + Capex COV (US\$/t ore)
Aguas Teñidas	55	68	77
Magdalena	53	67	74
Sotiel	49	65	73

Table 5 and Table 6 show a breakdown of ore reserves by mine and by material type with long section and plans shown in Figure 8 through to Figure 10. The long sections and plans show the updated Ore Reserve estimate stope and development designs which have been depleted for mining to the period ending 30 June 2023.

Table 5: MATSA Ore Reserve Estimate as at 30 June 2023 by Mine

Mine	Class	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (kt)	Ag (Moz)
Aguas Teñidas	Proved	10.2	116	1.4	3.8	1.2	50.9	139	384	119	16.7
J	Probable	5.3	91	1.1	2.7	0.7	32.7	58	146	40	5.6
	Total	15.5	107	1.3	3.4	1.0	44.7	197	530	158	22.3
Magdalena	Proved	11.5	136	2.0	2.3	0.7	33.5	228	265	78	12.3
3	Probable	5.6	112	1.7	1.7	0.5	25.7	93	95	30	4.6
	Total	17.1	128	1.9	2.1	0.6	30.9	321	360	108	17.0
Sotiel	Proved	2.6	74	1.4	1.2	0.5	27.3	35	30	13	2.3
	Probable	0.8	79	1.4	1.1	0.5	28.3	12	9	4	0.8
	Total	3.4	75	1.4	1.1	0.5	27.5	47	39	17	3.0
MATSA	Proved	24.3	121	1.7	2.8	0.9	40.1	402	679	210	31.3
Consolidated	Probable	11.8	100	1.4	2.1	0.6	29.1	162	251	73	11.0
	Total	36.0	114	1.6	2.6	0.8	36.5	565	930	284	42.3

Notes:

Numbers may not add due to rounding.



Table 6: MATSA Ore Reserve Estimate as at 30 June 2023 by Material Type

Mine	Class	Tonnes (Mt)	NSR (US\$/t)	Cu (%)	Zn (%)	Pb (%)	Ag (g/t)	Cu (kt)	Zn (kt)	Pb (kt)	Ag (Moz)
Aguas Teñida	S										
Polymetallic	Proved	8.9	117	1.3	4.3	1.3	54.6	116	377	116	15.6
	Probable	3.4	91	0.8	4.3	1.1	45.6	28	144	39	5.0
	Total	12.2	110	1.2	4.3	1.3	52.1	144	521	155	20.5
Cupriferous	Proved	1.3	103	1.8	0.6	0.2	25.9	23	7	3	1.1
	Probable	2.0	90	1.5	0.1	0.0	10.4	29	2	1	0.7
	Total	3.3	95	1.6	0.3	0.1	16.7	53	9	3	1.8
Total	Proved	10.2	116	1.4	3.8	1.2	50.9	139	384	119	16.7
	Probable	5.3	91	1.1	2.7	0.7	32.7	58	146	40	5.6
	Total	15.5	107	1.3	3.4	1.0	44.7	197	530	158	22.3
Magdalena											
Polymetallic	Proved	7.6	147	2.0	3.3	1.0	44.6	153	251	73	10.9
•	Probable	2.9	127	1.7	3.0	0.9	39.3	50	88	27	3.7
	Total	10.5	142	1.9	3.2	0.9	43.1	203	339	99	14.6
Cupriferous	Proved	3.9	114	1.9	0.4	0.2	11.9	75	14	6	1.5
•	Probable	2.7	96	1.6	0.3	0.1	10.5	43	7	3	0.9
	Total	6.6	106	1.8	0.3	0.1	11.3	118	22	9	2.4
Total	Proved	11.5	136	2.0	2.3	0.7	33.5	228	265	78	12.3
	Probable	5.6	112	1.7	1.7	0.5	25.7	93	95	30	4.6
	Total	17.1	128	1.9	2.1	0.6	30.9	321	360	108	17.0
Sotiel				·	·				·	·	
Polymetallic	Proved	1.3	62	1.2	1.7	0.8	28.9	15	22	10	1.2
	Probable	0.3	54	0.9	2.2	0.9	32.8	3	8	3	0.4
	Total	1.6	60	1.1	1.8	0.8	29.8	18	29	13	1.5
Cupriferous	Proved	1.3	85	1.5	0.6	0.3	25.7	21	8	3	1.1
•	Probable	0.5	97	1.7	0.4	0.1	25.1	8	2	1	0.4
	Total	1.8	88	1.6	0.5	0.2	25.5	29	10	4	1.5
Total	Proved	2.6	74	1.4	1.2	0.5	27.3	35	30	13	2.3
	Probable	0.8	79	1.4	1.1	0.5	28.3	12	9	4	0.8
	Total	3.4	75	1.4	1.1	0.5	27.5	47	39	17	3.0
MATSA Cons										·	
Polymetallic	Proved	17.7	126	1.6	3.7	1.1	48.5	283	650	198	27.6
,	Probable	6.7	105	1.2	3.6	1.0	42.1	82	240	69	9.1
	Total	24.4	120	1.5	3.6	1.1	46.8	365	889	267	36.6
Cupriferous	Proved	6.6	106	1.8	0.5	0.2	17.5	119	30	12	3.7
- ap 040	Probable	5.1	93	1.6	0.2	0.1	11.9	81	11	5	1.9
	Total	11.6	100	1.7	0.4	0.1	15.0	200	41	17	5.6
Total	Proved	24.3	121	1.7	2.8	0.9	40.1	402	679	210	31.3
IJIAI	Probable	11.8	100	1.7	2.0	0.6	29.1	162	251	73	11.0
	Total	36.0	114	1.4	2.6	0.8	36.5	565	930	284	42.3
	Tulat	30.0	114	1.0	2.0	0.0	30.5	505	930	204	42.3

Notes:

Numbers may not add due to rounding.



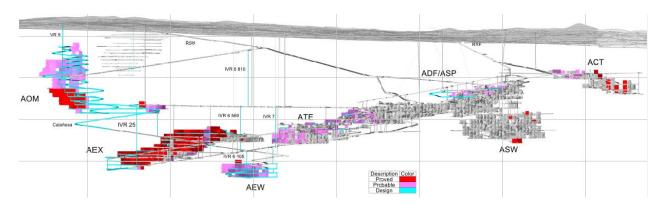


Figure 8: Long Section of Aguas Teñidas Ore Reserves 30 June 2023.

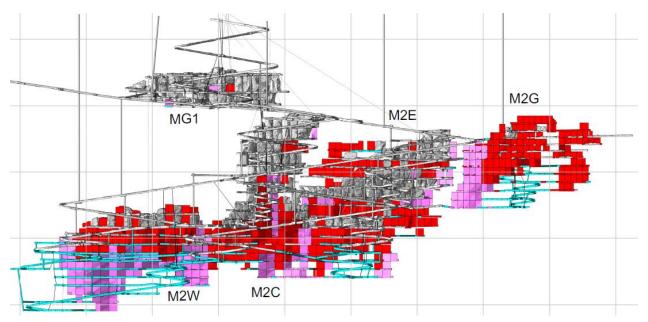


Figure 9: Long Section of Magdalena Ore Reserves 30 June 2023.



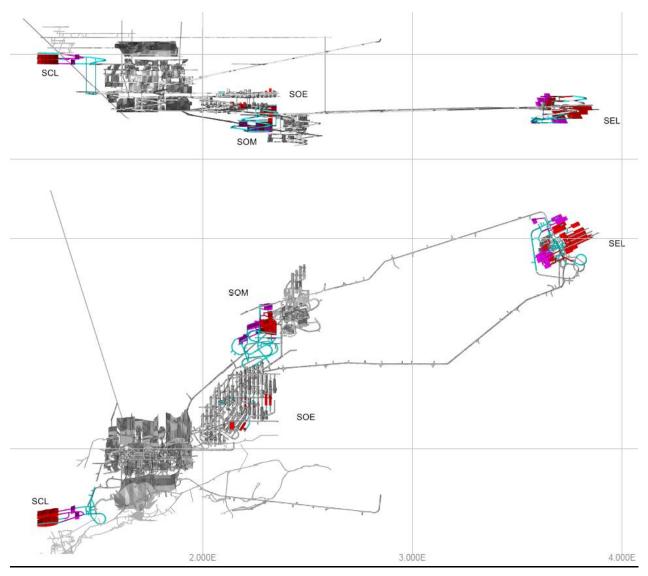


Figure 10: Long Section and Plan of Sotiel Ore Reserves 30 June 2023.

Changes to the MATSA Ore Reserve Estimate

Notable changes to the modifying factors adopted for the 30 June 2023 Ore Reserve are shown in Table 7.

Table 7: Changes to Modifying Factors

Item		Ore Reserve 30 June 2023	Comments
Commodity Prices and FX			
Cu Price (US\$/t)	8,020	8,100	SFR Corporate forecast
Zn Price (US\$/t)	2,300	2,500	SFR Corporate forecast
Pb Price (US\$/t)	1,785	1,983	SFR Corporate forecast
Ag Price (US\$/oz)	18.5	19.1	SFR Corporate forecast
FX EUR:USD	1.20	1.19	SFR Corporate forecast



Item		Ore Reserve 30 June 2023	Comments
Cut-off Value			
ATE – Incr., Opex., Opex+Capex (US\$/t ore)	40, 64, 78	55, 68, 77	Updated based on actuals and forecast
MGD – Incr., Opex., Opex+Capex (US\$/t ore)	43, 59, 67	53, 67 74	Updated based on actuals and forecast
SOT – Incr., Opex., Opex+Capex (US\$/t ore)	50, 70, 78	49, 65, 73	Updated based on actuals and forecast and a redistribution of overheads to ATE and MGD
Dilution (External)			
ATE (%)	12	12	
MGD (% or m)	12 M2G HW 1m FW 2m	12 MG1 8	
SOT (%)	SOT 12 SOE 18 SEL 10	SCL 18 SEL 12 SOM 18 SOE 14	Operating experience, technical review
Mining Recovery			
ATE (%)	90	ATE, ADF 50 ADF LH,	Operating experience, technical review, continuous improvement initiatives. Areas with elevated extraction risk have reduced recovery and are classified as Probable
MGD (%)	90	93	Operating experience, technical assessment, continuous improvement initiatives. Areas with extraction risk are classified as Probable
SOT (%)	95	94	
Process Recovery			
Polymetallic: Aguas Teñidas and Magdalena	Zn >1.7% (45-83%) Cu >1.0% (62-79%) Pb >0.9% (26-50%)	Zn >1.7% (67-83%) Cu >0.4% (50-79%) Pb >0.9% (25-50%)	Operating experience, technical review, continuous improvement initiatives
Polymetallic: Sotiel	Zn >2.5% (48-71%) Cu >1.0% (51-75%) Pb >1.0% (25-36%)	Zn >2.5% (57-71%) Cu >0.4% (40-75%) Pb >0.9% (25-36%)	Operating experience, technical review, continuous improvement initiatives
Copper: Aguas Teñidas, Magdalena, Sotiel	Cu >0.5% (50-93%) SOT Cu >0.5% (48-88%)	Cu >0.5% (83-92%)	Operating experience, technical review, continuous improvement initiatives
Copper stockwork: Aguas Teñidas and Magdalena	Cu >0.3% (66-93%)	Cu >0.2% (85-92%)	Operating experience, technical review, continuous improvement initiatives

Approximately 4.4Mt ore reserve tonnes containing 80kt of copper and 120kt of zinc were extracted from the MATSA mines during the period 30 April 2022 to 30 June 2023.



Approximately 3.3Mt ore tonnes containing 52kt of copper and 75kt of zinc were added to the ore reserves because of updates to the Mineral Resources and application of updated modifying factors.

When compared with the previous Ore Reserve estimate reported as at 30 April 2022, the updated 30 June 2023 Ore Reserve provides a 3% decrease in contained tonnes, an 5% decrease in contained copper and a 5% decrease in contained zinc. This result broadly replaces ore reserve mining depletion over the intervening 14-month period.

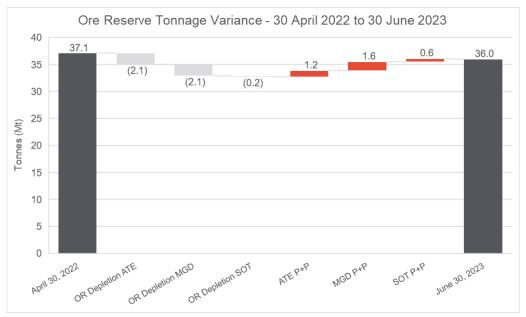


Figure 11: Ore Reserve tonnage variance - 30 April 2022 to 30 June 2023.

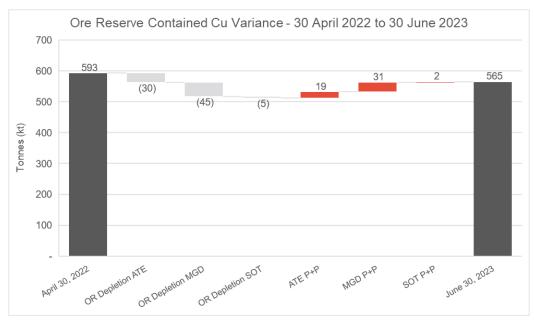


Figure 12: MATSA Ore Reserve contained copper variance – 30 April 2022 to 30 June 2023.



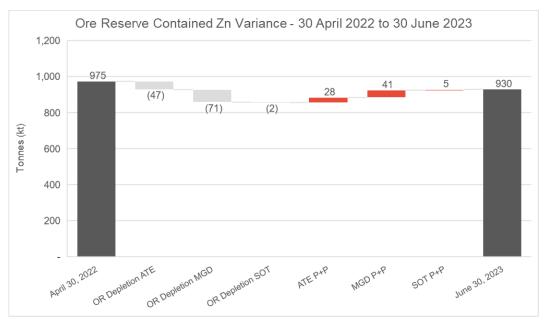


Figure 13: MATSA Ore Reserve contained zinc variance - 30 April 2022 to 30 June 2023.



APPENDIX 1: JORC CODE, 2012 EDITION – TABLE 1

MATSA COPPER OPERATIONS

JORC Code Assessment Criteria	Comment
Section 1 Sampling Techniques and Data	
Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.	 Drilling undertaken by MATSA conforms to industry best practices and the resultant sampling pattern is sufficiently dense to interpret the geometry, boundaries, and different styles of the sulphide mineralisation at the three mines with a high level of confidence within well drilled areas. The procedure used to acquire drilling information in historic programs (prior to 2004) is not documented or recorded. Historical holes are generally surrounded by a majority of more recent MATSA drillholes (post 2004) which largely confirm the location of mineralisation which indirectly suggests that the location accuracy of the historical holes is reasonable. Historical drillholes comprise less than 22% of all drillholes at the Project and where these exist, the mineralisation location is confirmed by surrounding MATSA drillholes All samples from all three mines were taken from diamond drill cores drilled from both, surface and underground. Samples were cut longitudinally in half using an auto-feeding diamond core saw, or whole core, depending on the purpose of the drill hole and the core diameter. Sampling intervals are then marked, typically at 2m intervals, although this is reduced depending on the geology and mineralisation in the core. The most common sample lengths in the assay database are 1m and 2m. Diamond drill holes were generally sampled along their entire length.



JORC Code Assessment Criteria	Comment
Drilling techniques Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.), and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	 All drilling conducted at the three mines and the surrounding areas to date has been diamond drilling ("DDH") – from both surface and underground collar locations. Drilling has been carried out by external third-party contractors both for surface and underground programs. The diamond drilling has been conducted using various drilling machines and is usually undertaken using wireline double tube tools. Coring sizes vary with surface drillholes progressing from PQ to HQ, and then NQ, depending on the target depth of the drillhole. The underground exploration drillholes start in HQ and can be reduced to NQ size depending on the target depth of the drillhole. The underground production drillholes are all NQ in diameter and reduction in size are not applied, as these are typically short in length. Almost all massive sulphide mineralisation is drilled using HQ or NQ diameters
Drill sample recovery Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	 The drill core is transported from the drilling rigs to the Core Shed where it is sorted and stored before being processed. Core intervals are measured against the drillers recorded measurements and then the core recovery is determined by MATSA geologists. The core recovery in the mineralised horizons is rarely less than 95% for all drilling contractors. Core was cut along a cut-line marked by the supervising geologist, which was marked orthogonal to the main core axis.



JORC Code Assessment Criteria	Comment
Logging Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.), photography. The total length and percentage of the relevant intersections logged.	 The drill core is laid out on an angled logging rack with dedicated lights and water supply. The MATSA logging includes lithological coding as well as assigning an overall geological unit. The lithological coding system used at the three mines records 68 individual rock types. These individual rock types are grouped into an overall geological unit code, or main rock type. The core logging is qualitative in nature whereas the sampling and results are quantitative. All drill cores are photographed and catalogued appropriately. All drill holes are fully logged. Longitudinally cut half core samples are produced using a core saw. No non-core data was used in the Mineral Resource Estimate.
Sub-sampling techniques and sample preparation If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc., and	• For all intersections with logged presence of sulphides and adjacent waste zones, cores are marked for sampling and cut into two equal halves. The core is placed in a v-rail prior to being placed in the core cutting machine, the core is then cut. One half of the core is selected for sample preparation and assay analysis, whilst the other is retained as a reference sample.
whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	 Core sample preparation at the laboratory was completed as follows: Weight. Oven dry, each sample is stored in a metal tray on a rack and dried at 105°C for at least two hours. The entire dried sample is first crushed using a jaw crusher. The sample is then run through a cone crusher which reduces 90% of the particles to less than 2 mm in size. Each sample is then placed on a large plastic sheet and rolled (mixed) 20 times to homogenise the
Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	 Sample. After homogenisation, sample is split using an automatic riffle splitter resulting in a 500g sample, the sample must be at least 400g in weight and no more than 800g. The 500 g sample is milled using a ring mill for seven minutes resulting in the sample particles passing through a 75 µm sieve. The pulverised sample is then placed on a large plastic sheet, and it is mixed (rolled) 20 times to homogenise the sample. The pulp sample is then dip sampled to obtain a 150g sub-sample. Any external check samples, which require pulp material, are also taken during this process (external umpire and MATA reference samples). This 150g sample is then placed in a small plastic or paper bag with the sample number printed on it.



JORC Code Assessment Criteria	Comment
	 Coarse blanks and twin duplicates are inserted at the laboratory at the start of the sample preparation process.
	 Duplicate analysis of pulp samples has been completed and identified no issues with sampling representatively with assays showing a high level of correlation.
	The sample size is considered appropriate for the mineralisation style.
Quality of assay data and laboratory tests The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	 Samples are assayed using ICP-OES, with aqua regia digest at the Internal MATSA laboratory. Samples are also fire-assayed for Au. The elements (Cu, Zn, Pb, Ag, Au, As, Sb, Bi, Cd, Ni, Se, Mn and Co, Hg, Fe and S) are analysed at the MATSA laboratory, along with the minimum detection limits of the assaying equipment (ICP- OES).
For geophysical tools, spectrometers, handheld XRF	Historically at the Sotiel Mine, only Cu, Zn, Pb, and S% were assayed for (unknown method).
instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	 The historical Aguas Teñidas core was assayed for the current MATSA suite of elements in most cases (when the mine was active), typically by ICP and XRF.
Nature of quality control procedures adopted (e.g., standards,	No geophysical tools were used to analyse the drilling samples.
blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	 QAQC samples (blanks, certified reference material and duplicates) are inserted by MATSA staff into the sample stream prior to these being sent to the laboratory for assay analysis. MATSA also employs ALS (previously OMAC Laboratories Ltd) and ALS Chemex (Global) as its external reference laboratories used to undertake check (umpire) assay analysis.
	Blank samples used by MATSA comprise silica material and have been included in the sample stream for Aguas Teñidas since 2009. In reviewing the blanks analysis data, MATSA has applied a 4X detection limit threshold, specific for each element. Samples which plot above this threshold are determined as failed samples is typically due to contamination or a mix up of samples (incorrect labelling). The results of the blank analysis demonstrate that the sample preparation process employed at MATSA limit contamination to a reasonable level.
	 Fine blank samples were used by MATSA on 2016 for Aguas Teñidas and Magdalena and 2017 for other projects (these samples have not continued to be made). Those comprise pulped (homogenised) silica material, these have been included in the sample stream. The results of the fine blank analysis are within reasonable limits, with little evidence for sample contamination between the ICP samples.



JORC Code Assessment Criteria	Comment
	• Twin duplicate samples used by MATSA are quarter core field duplicate samples which have been included in the sample stream at Aguas Teñidas and Magdalena since 2016, and at the other deposits since 2017. As expected, these duplicate results show a wider range of variation than the other duplicate types inserted into the sample stream by MATSA but still show reasonably good repeatability as well as good correlation between the original and duplicate sample. The twin duplicates report correlation coefficients typically more than 0.85 (most above 0.9).
	 Coarse duplicate samples used by MATSA are collected after the second split following crushing. The results for the coarse duplicates show a high degree of repeatability and a very high degree correlation between the original and duplicate sample, with a correlation coefficient typically more than 0.97.
	• Internal pulp duplicates sample used by MATSA are collected at the final stage of sample preparation. The results for the pulp duplicates show a high degree of repeatability and a high degree of correlation between the original and duplicate sample, with a correlation coefficient typically more than 0.98.
	 External duplicate samples are collected at the final stage of sample preparation and sent to the umpire laboratory (ALS Laboratories, Ireland ISO/IEC 17025). The results for the external duplicates show a high degree of repeatability and a high degree of correlation between the original and duplicate samples, with a correlation coefficient typically more than 0.97.
	• MATSA has used 37 different CRM across all the deposits since production at the Aguas Teñidas mine recommenced in 2008. The CRM are used to monitor Cu, Zn, Pb, Ag, and Au grades. All CRM used have been created in - house by MATSA and were sent for round robin laboratory analysis, at ALS Vancouver, ALS Loughrea, SGS Peru, SGS Canada, ALS Perth, and ALS Brisbane. Overall, the grade ranges of the CRM are representative of the different mineralisation types (cupriferous and polymetallic) and grades as demonstrated in the drillhole statistics.
	 GeosEstima considers that the QAQC results for each of the deposits to demonstrate acceptable levels of accuracy and precision at the laboratories.
	 GeosEstima therefore has confidence that the associated assays are of sufficient quality to be used in the subsequent Mineral Resource estimate.
Verification of sampling and assaying	Documented verification of significant intervals by independent personnel has not been done, however
The verification of significant intersections by either independent or alternative company personnel.	the mineralisation appears to be reasonably continuous and is not dominated by any one significant intersection.
The use of twinned holes.	



JORC Code Assessment Criteria	Comment
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	 Furthermore, the tenor of copper and zinc is visually predictable in massive or semi massive sulphide intersections.
Discuss any adjustment to assay data.	 A number of new drillholes have been drilled in proximity of older ones and confirm existing information. Consequently, no twinned holes have been drilled.



JORC Code Assessment Criteria	Comment
Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	 The MATSA drillhole collars, for both underground and surface drillholes, are surveyed by the MATSA survey department. The surface collar locations are surveyed using GPS total station which has a reported accuracy of less than 10cm in the X, Y, and Z coordinates. The underground collars are surveyed using a total station method which has an accuracy of less than 10cm in the X, Y, and Z coordinates. The procedure used to survey historic drillhole collars (drilled prior to 2004) is not documented or recorded. Historical holes are generally surrounded by a majority of MATSA drillholes which largely confirm the location of mineralisation which indirectly suggests that the location accuracy of the historical holes is reasonable. Regarding downhole survey the majority of the drillholes have a start and end of hole measurement only. MATSA typically uses a REFLEX Flexi-It multi-shot tool for all of its downhole surveys, with the measurements taken every 25m. The REFLEX tool is a magnetic tool, and the survey azimuth is aligned to mine grid north. Collars are marked out and picked up in the ETRS89 UTM Zone 29 N format. Validation of surface diamond drilling collars was carried out by independent consultants (SRK) in previous MREs in Elvira and Calañesa using a handheld GPS. This process found no major discrepancies when these were compared against the satellite imagery. Underground drillhole collars were also compared against the underground development with no major issues identified. A local mining grid is used at the three mines. Aguas Teñidas and Magdalena mine use the same local grid. Conversion to this grid is undertaken from WGS84 co-ordinates and is achieved by adding 1,002.968m to the elevation (2) values (to avoid negative numbers in the underground development) and then a translation is applied to the X and Y coordinates by adding 0.006m to the X and 0.196m to the Y coordinate respectively. Sotiel mine grid is calculat



JORC Code Assessment Criteria	Comment
Data spacing and distribution Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. Orientation of data in relation to geological structure Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	 All surface and underground drilling at the three mines is typically aimed to intersect mineralisation perpendicular to strike where access facilitates this. From surface drilling is on 30 to 50 m sections (north-south), meanwhile underground is on 20m spacing. No sample compositing is applied during the sampling process. All drilling undertaken at the three mines is typically aimed to intersect mineralisation perpendicular to strike where access facilitates this. A few geotechnical holes were not drilled perpendicular to the strike of the mineralisation, although these were not specifically intended for use in geological modelling or MRE. No significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralisation. Drilling undertaken by MATSA conforms to industry best practices and the resulting sampling pattern is sufficiently dense to interpret the geometry, boundaries, and different styles of the sulphide mineralisation at the three mines with a high level of confidence within well drilled areas. Confidence in the geological interpretation decreases in areas of reduced sample coverage and is reflected in the classification of mineral resources. It is GeosEstima's view that the drilling orientations are appropriate to model the geology and
Sample security The measures taken to ensure sample security.	 mineralisation based on the current geological interpretation. All drill cores from the three mines are delivered to the core shed, usually via flatbed trucks, for photography, core recovery calculations, geological and geotechnical logging, and sampling. The core shed, sample preparation facilities and laboratory are all confined within secure boundaries, with controlled access points, where only authorised, mine personnel are allowed entry.
Audits and reviews The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been completed.



JORC Code Assessment Criteria	Comment
Section 2 Reporting of Exploration Results	
Mineral tenement and land tenure status Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	 MATSA currently holds 47 mining permits which cover all three mines and has the rights to exploit the Aguas Teñidas and Magdalena mines in the municipality of Almonaster la Real and the Sotiel mine in the municipality of Calanas, both of which are located in the province of Huelva. The Company also has exploitation (mining) and research (exploration) permits which cover more than 1,100 km² in the IPB and 160km² in the Spanish region of Extremadura. The Aguas Teñidas, Magdalena, and Sotiel mines are covered by 22, 23, and 2 mining permits, respectively. The Aguas Teñidas mining permits were renewed in 2012 for a 30-year period and are due to expire on 31 August 2042. The Magdalena mining permits were issued in 2013 and are due to expire on 15 January 2043, except for the Magdalena Masa 2 permit which is due to expire on 07 July 2046. The Sotiel mining permit was renewed in 2015 and is due to expire on 19 January 2045. MATSA was granted an exploration permits for the Concepción, Poderosa and Castillo-Buitrón projects. The "Permiso de Investigación El Patrás" (exploration permit) which includes Concepción was granted to MATSA on the 14/11/2002. On the 17/01/2018 MATSA applied for a mining permit which is currently being processed by the authorities, Exploration work continues in this area. The "Permiso de Investigación Buitrón" (exploration permit) which includes the Castillo-Buitrón Project was granted to MATSA on the 03/11/2015. A first 3-year extension was granted on the 03/06/2020. The "Permiso de Investigación Buitrera" (exploration permit) which includes the Poderosa Project was originally granted to MATSA on the 28/01/2010. MATSA applied for a third 3-year extension on the 03/12/2021.
Exploration done by other parties Acknowledgment and appraisal of exploration by other parties.	 Mining in the IPB has occurred for over 2,500 years. Activity can be dated to Roman and Phoenician periods. Significant interest in IPB did not re-emerge until the 1800s following the successful extraction of Cu, resulting in over 60 mines operating by 1900. The Rio Tinto Company was formed in 1873 to operate these mines. The discovery of the Neves Corvo deposit in 1977, renewed exploration interest in the region, which ultimately led to the discovery of the mineralisation associated with the Aguas Teñidas mine and re-opening of the Sotiel Mine in 1983. The Calañesa deposit is the oldest known deposit in the mine area. The deposit was first mined in the Roman period; however, the oldest records referencing exploration and mining are from 1886 by the Compagnie des Mines de Cuivre d Aguas Teñidas, who operated the mine until the end of the 19th Century. It was later mined in 1916 by Huelva Copper Company until 1934. Since this time, most of the exploration in relation to the Calañesa deposit has been surface drilling by MATSA, the majority of



JORC Code Assessment Criteria	Comment
Geology Deposit type, geological setting and style of mineralisation.	 which was completed in 2018, except for the exploration conducted by Billiton during the 1980s. Billiton relinquished the property in 1990. Placer Dome subsequently acquired the project and between 1991 and 1994 drilled the deposit and built on Billiton's previous work. Navan then acquired the project between 1995 and 2000 and, in 1995, acquired the mining rights for the Aguas Teñidas and Western Extension deposit. In April 1997, Navan acquired Almagrera SA from the Spanish government. This operation comprised the Sotiel underground mine, a minerals processing complex (at Sotiel mine) for Cu, Zn, and Pb, and an acid plant. The Castillejito deposit was discovered by RioMin in 1998 via gravimetric survey. Magdalena deposit was discovered by MATSA in September 2011. The Sotiel mine comprises the Sotiel, Sotiel East, Migollas, Elvira, and Calabazar deposits. There is limited information available on the historical exploration and mining previously conducted at the mine. The MATSA deposits are all interpreted to be volcanogenic massive sulphide, or VMS, deposits. VMS deposits are predominantly stratiform accumulations of sulphide minerals that precipitate from upwelling hydrothermal fluids associated with magmatism on or below the seafloor in a wide range of geological
	 The deposits at Aguas Teñidas and Magdalena mines also have stockwork sulphide zones in the footwall that can be quite extensive and are characterised by primarily pyrite and chalcopyrite mineralisation.
	 The deposits which comprise the Project have been categorised as Kuroko type VMS deposits based on their mineralogy, geological setting, and geometry/size.
Drill hole information	No Exploration Results have been reported in this release. This criterion is not relevant to this report on
A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Mineral Resources.
Easting and northing of the drill hole collar	
 Elevation or rl (reduced level – elevation above sea level in metres) of the drill hole collar 	
Dip and azimuth of the hole	
Downhole length and interception depth	



JORC Code Assessment Criteria	Comment
Hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not	
detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	



JORC Code Assessment Criteria	Comment
Data aggregation methods In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.
The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known').	No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.
Diagrams Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.
Balance reporting Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	 No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.



JORC Code Assessment Criteria	Comment
Other substantive exploration data Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment, metallurgical test results, bulk density, groundwater, geotechnical and rock characteristics, potential deleterious or contaminating substances.	 No Exploration Results have been reported in this release. This criterion is not relevant to this report on Mineral Resources.



JORC Code Assessment Criteria	Comment
Further work The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	MATSA is carrying out Brownfield exploration around its mines and Greenfield exploration programs in Spain and Portugal.
Section 3 Estimation and Reporting of Mineral Reso	ources
Database integrity Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	 The databases were directly exported from the master Geobank (Micromine) database, as managed by MATSA geologists. The following drillhole data was included: Collars including collar co-ordinates, hole lengths, date drilled, etc. Downhole surveys; lithology; specific gravity samples (density); and sample assay intervals. GeoEstima completed a phase of data validation on the digital sample data supplied by the Company, and previous owners of the mines, from their Geobank (Micromine) database which included the following: Search for sample overlaps, duplicate or absent samples; Checks for anomalous assay results; Checks for incorrect or irregular survey results; and Search for non-sampled drillhole intervals within the mineralised zones.
Site visits Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	 A site visit has been undertaken by Competent Person between April 25 to 28, 2022. The visit included the following inspections: The Core shed and MATSA Internal laboratory facilities, Aguas Teñidas and Magdalena mines; The process plant; and A set of representatives drillhole cores was reviewed with the resource and exploration geologists in order to discuss the main geological features of deposit. Ore control process was reviewed and several meetings with key ore control geologists, mine geologists, resources geologists, mine planning engineers and metallurgists were held.



JORC Code Assessment Criteria	Comment
Geological interpretation Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	 The main control of mineralisation is well known, but confidence in the geological interpretation varies locally and is dependent on the spacing of drilling of which varies throughout the deposit. The geological model of Aguas Teñidas Mine includes the Aguas Teñidas, Western Extension, Calañesa, and Castillejito deposits. The geological model of Magdalena mine includes Masa 1, Masa 2, Masa Gold and Masa Gold Norte deposits, and the geological model of Sotiel Mine includes Sotiel, Sotiel East, Migollas, Calabazar, and Elvira deposits. Each deposit was interpreted by MATSA geologists on cross-sections using implicit and explicit methodology. For deposits modelled by implicit tools Leapfrog Geo software was used creating wireframes of massive or semi-massive sulphides (MS) or stockwork (SW) for the cupriferous stockwork zones based on logged rock code in the drilling database. The explicit models were made on cross-sections, based primarily on the occurrence of logged massive or semi-massive sulphides in diamond drillholes and underground exposures, where applicable. The cross-section interpretations are triangulated in Datamine software to produce volumes denoted as SM and SW by the MATSA geologists. All available geological logging data from diamond core are used for the interpretations. The geological interpretation of mineralised boundaries is considered robust and alternative interpretations do not have the potential to impact significantly on the Mineral Resource estimation, domains are intrinsically related to the geology. The massive sulphides and cupriferous stockwork mineralisation are controlled by tabular lens shaped bodies which are typically strata bound and or structurally controlled to varying degrees.
Dimensions The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Polymetallic mineralisation in Aguas Teñidas mine is related to four tabular lens shaped bodies. Together Aguas Teñidas and Western Extension extend from approximately 270m to 890m below surface. Mineralisation extends for 3,000m along west-east strike, dipping 80° to the north. The cumulative total true width of mineralisation ranges from 10m to 80m. Calañesa is a smaller tabular lens extending from approximately 100m below the surface. Mineralisation extends for 400m along west-east strike, dipping 60° to the south. The cumulative total true width of mineralisation ranges from 1m to 4m. Castillejito is composed of two tabular lenses with synclinal shape extending from approximately 100m below the surface located to the North of Aguas Teñidas. Mineralisation extends for 750m along



JORC Code Assessment Criteria	Comment
	West-East strike, dipping 68° to the north. The cumulative total true width of mineralisation ranges from 10m to 50m
	 Polymetallic mineralisation in Magdalena mine is related to tabular lens shaped bodies extending from approximately 100m to 830m below surface. Mineralisation extends for 2,000m along West-East strike, dipping 70° to the north. The cumulative total true width of mineralisation ranges from 3m to 70m.
	Polymetallic mineralisation in Sotiel mine is related to four tabular lenses shaped bodies extending from approximately 200m to 400m below surface. Mineralisation extends discontinuously; Calabazar and Sotiel extend 600m along a 60°E strike, dipping 40° to the northwest. The cumulative total true width of mineralisation ranges from 3m to 30m; Migollas extends 250m along 60°E strike, dipping 40° to the northwest. The cumulative total true width of mineralisation ranges from 3m to 20m; Elvira extends 400m along 60°E strike, dipping 40° to the northwest. The cumulative total true width of mineralisation ranges from 10m to 40m.
	 Polymetallic mineralisation in Castillo-Buitrón is composed of two east-west oriented tabular lens outcropping to surface, dipping 70° to the north: Poniente and Levante. The former extends for 170m along strike and 300m in depth, with thickness from 5m to 20m, and the latter extends for 90m along strike and 200m in depth, with thickness ranging from 5m to 12m.
	 Polymetallic mineralisation in Concepción is related to east-west oriented tabular lens outcropping to the surface, dipping 67° to the north. It currently extends for 500m along strike and 700m in depth, with thickness ranging from 5m to 50m (higher thickness is reached in the upper part were two lenses run parallel).
	 Polymetallic mineralisation in Poderosa is composed of two parallel East-West oriented tabular lenses, recognisable from 200m below surface. Mineralisation extends for 250m along strike, 750m in depth with thickness ranging from 5m to 38m.



JORC Code Assessment Criteria	Comment
Estimation and modelling techniques The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, and	 Multivariate data analysis shows high degree of correlation between Cu and Bi; between Zn, Ag, Pb, Hg and Sb; and between F and S. There is not a clear correlation between Cu and Zn. This analysis was considered as an initial driver in the grade estimation process.
maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 Domains for Cu and Bi estimates were defined within Cu mineralisation wireframes, in some cases, these bodies were divided into sub-zones to define domains of high and low-grade Cu.
The availability of check estimates, previous estimates and/or	 Different divisions into sub-zones to define domains of high and low-grade zinc were applied. Within these domains Zn, Ag, Pb, Hg and Sb were estimated.
mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	 The majority of samples were composited to 4m in length, in few cases to 2m in length using domain wireframes as restriction.
The assumptions made regarding recovery of by-products.	The original Cu mineralisation domains were used for Au, As, Fe, S and density estimates.
Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).	 Grade estimation technique applied for estimation within Cu, Zn and mineralisation domains was ordinary kriging (OK) for all variables Cu, Bi, Zn, Ag, Pb, Hg, Fe, S, density, and most part of domains. Only in a few domains, where data was scarce, Inverse Distance Squared (IDW2) was applied.
In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	 Analysis suggests that a stationarity assumption is reasonable for the style of deposit and linear estimation of grades. Variograms are bounded and well structured. Variograms were fitted for all domains independently. In some domains variograms model were fitted on transformed data.
Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables.	 Top cuts were applied to isolated high-grade composites prior to estimation where applicable based on review of histograms, disintegration analysis and statistical analysis of composites. Distance based top cuts were also used to limit the influence of isolated high-grade composites.
Description of how the geological interpretation was used to control the resource estimates.	 The search ellipsoid was settled in three nested neighbourhood and is constrained by the optimum number of samples to ensure data used to estimate blocks. Searching with local orientation was applied based on a reference surface interpreted for each mineralised solid.
Discussion of basis for using or not using grade cutting or capping.	Mineral Resource estimation was completed with Isatis Neo software.
The process of validation, the checking process used, the	Silver, gold, and lead has been estimated as a by-product within the MATSA deposits.
comparison of model data to drill hole data, and use of reconciliation data if available.	Estimates include deleterious or penalty elements As, Bi, Hg, and Sb.



JORC Code Assessment Criteria	Comment
	No selective mining units are assumed in this estimate.
	 There are correlations between Cu and Bi; between Zn, Ag, Pb, Hg and Sb; and between F and S. There is not a correlation between Cu and Zn.
	 The block model is assigned unique domain codes matching the corresponding domain codes defined by mineralisation wireframes. Wireframes are then used as hard boundaries during interpolation where blocks are estimated only with composites having the corresponding domain code.
	 Top cuts were applied to isolated composites prior to estimation where applicable based on review of histograms, probability plots, deciles, and statistical analysis.
	The process of validation includes standard model validation using visual and numerical methods:
	 The block model estimates are checked visually against the input composite/drillhole data; Swath plots of the estimated block grades and composite mean grades are generated by eastings, northings and elevations and reviewed to ensure acceptable correlation, and; Global statistical comparisons of mean estimated block grades to mean composite grades.
Moisture	Tonnages are estimated on a dry basis.
Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	



JORC Code Assessment Criteria	Comment		
Cut-off parameters The basis of the adopted cut-off grade(s) or quality parameters applied.	 Polymetallic mineralisation suggests using NSR to value resources. NSRs has been calculated based on metallurgical information obtained from cumulative process plant experience and on Sandfire's long-term metal price projections. NSR cut-offs were calculated considering mining and plant costs different for each mine (Aguas Teñidas, Magdalena, and Sotiel). NSRs are defined by ore type: Polymetallic ore and Cupriferous ore. Mineral Resources are estimated at the following NSR cut-off: Magdalena: US\$53/t Aguas Teñidas and projects: US\$55/t Sotiel: US\$49/t Mineral Resources are estimated using the following long-term prices: Cu US\$9,761/t Zn US\$2,171/t Ag US\$21.97/oz Cu recovery for Polymetallic ranged between 40% and 79%, for Cupriferous ranged between 83% and 92% and for Stockwork ranged between 85% and 92%. Zn recovery for Polymetallic ranged between 57% and 83%. Pb recovery for Polymetallic ranged between 25% and 50%. 		
Mining factors or assumptions	Mineral Resource potentially can be economically mined by underground mining methods. It is		
Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.	assumed any of the current mining method used by MATSA can be used (Aguas Teñidas and Magdalena are mined for transverse and longitudinal sub-level, longhole open stoping. At the Sotiel mine, a modified long hole stoping approach is employed).		
It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is	The NSR value is computed for each mine using metal prices (Cu, Zn, Pb) greater than the prices used for Life of Mining planning to evaluate the proportions of the block model that could assure "reasonable prospects for eventual economic extraction.".		



JORC Code Assessment Criteria	Comment
the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting	• Mineral Resources are estimated assuming that these will be processed in the Aguas Teñidas processing plant. This plant has two separate processing streams, a polymetallic and a copper processing stream, which are used to produce concentrates. The polymetallic mineralisation stream processes polymetallic massive sulphide material, whereas the copper mineralisation stream processes mineralisation stemming from stockwork material and cupriferous massive sulphides.
Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. Environmental factors or assumptions	Capacity exists within current approvals to accommodate waste rock and tailings for the remaining
Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 Mineral Resource in the existing facilities at MATSA. With the reopening of the mine in 2013, MATSA has recovered old waste dumps (environmental rehabilitation) in areas degraded by historical mining activity. These dumps may be used to fill the Sotiel mine stopes in the future.



JORC Code Assessment Criteria	Comment							
Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	complewater. for der In min In the The water) It show typical Fe. No ass	ry measurements heted by weighing a The MATSA geolonsity analysis. eralised zones three case of barren roce eight of the dry sar submerged in wated by MATSA to dealy an issue accord sumptions for bulk by is estimated using around the Cu do	piece of core pigists typically ee density me ks sampling is mple is initially er to determin termine the d IATSA does r ing to MATSA density were	e in air and they select intact easures are avec sperformed easy determined the submergry density: Denot coat drill coat. There is a sumade.	en determin drill core w veraged for very 15m to using bench ged weight. nsity = weig ores with watrong correl	ing the core hich are bet a sampling b 20m for de n mounted e The followinght (in air) / ax as pore s lation between	e volume by dis ween 5cm or 1 support of 2m is ensity measure electronic scale ng equation ha (weight (in air)) pace (vugs/fra en specific gra	placement of Ocm in length n length. ment. s, before s then been – weight (in ctures) are not vity and S and
Classification The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors, i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data. Whether the result appropriately reflects the Competent	selecti MATS	assification criteria vity of the mining r A has been emplo cile appropriately (b	method in thre	ee mines of Mastances to drill	ATSA. hole criteria	a for several	years and find	that they
	Class	Aguas Teñidas, Western Extension, Calañesa	Castillejito	Magdalena	Sotiel	Castillo- Buitrón	Concepción	Poderosa
Person(s)' view of the deposit.	Measured	<20 m	<20 m	<=25m	<=20 m			_
	Indicated	<40m	<40m	<=50m	<=40m	<40m	<40m	
	Inferred	>40m	>40m	>50m	>40m	>40m	>40m	only inferred



JORC Code Assessment Criteria	Comment		
	The Mineral Resource estimation appropriately reflects the Competent Person's view of the deposit.		
Audits or reviews The results of any audits or reviews of Mineral Resource estimates.	 No external audits or reviews have been completed. The Resource Estimates have been reviewed internally by qualified Sandfire personnel and are considered fit for purpose. 		



JORC Code Assessment Criteria	Comment
Discussion of relative accuracy/confidence Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	 The accuracy and confidence level in the Mineral Resource estimate is commensurate with that implied by the classification. The classification criteria take in account mining experience of MATSA in this type and style of mineralisation. The Mineral Resource is derived from a block model that is intended to have sufficient local accuracy to be useful for mine planning decisions. Factors that affect accuracy and confidence include: The accuracy of the interpreted position of mineralised domain boundaries; and Estimated block grades being smoother than true grades, due to OK having been used as the interpolation method.
Section 4 Estimation and Reporting of Ore Reserve	s
Mineral Resource estimate for conversion to Ore Reserve Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	 The reported Ore Reserves for the Aguas Teñidas (ATE), Magdalena (MGD) and Sotiel (SOT) operations are based on the 10 block models which formed the basis of the Mineral Resource estimates. The effective date of both the Mineral Resource and Ore Reserve statements is 30 June 2023. Mineral Resources and Ore Reserves incorporate depletion by MATSA up to 30 June 2023. Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.
Site visits	The Competent Person for this Ore Reserve statement is a full-time employee of Sandfire Resources
Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	(Sandfire), is based in Perth, and has visited site on multiple occasions during financial year 2023.



JORC Code Assessment Criteria	Comment		
Study status The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 MATSA has been in commercial operation since 2009. Aguas Teñidas from 2009, Magdalena from 2015 and Sotiel from 2014. It is noted that both Aguas Teñidas and Sotiel mines have prior historic mining activity pre MATSA. The Modifying Factors used in the conversion of Mineral Resources to Ore Reserves are based on current and historic MATSA operating experience. 		
Cut-off parameters The basis of the cut-off grade(s) or quality parameters applied	 An NSR cut-off value approach is applied for each stope or development block, with each value calculated according to the ore type, metal grades, metallurgical recoveries, realisation costs, transport costs, forecast metal prices and the payability of each metal according to offtake agreements. NSR values are estimated for individual blocks into each respective mineral resource block model. Key parameters applied are as follows: Long term real commodity prices: Cu US\$8,100/t, Zn US\$2,500/t, Pb US\$1,938/t, Ag US\$19.10/oz Exchange rate: EUR/USD 1.19 Process plant recoveries are estimated from material type grade recovery curves and applied by mine, material type and concentrate product: Polymetallic: Aguas Teñidas and Magdalena – Zn (67-83%), Cu (50-79%), Pb (25-50%). Polymetallic: Sotiel - Zn (57-71%), Cu (40-75%), Pb (25-36%). Copper: Aguas Teñidas and Magdalena – Cu (83-92%). Copper stockwork: Aguas Teñidas and Magdalena – Cu (85-92%). Metal payability, penalties, realisation costs, shipping costs are based on current offtake agreements for the various concentrates. Mine to port logistic costs are based on current road transport contract pricing. NSR cut-off values used, development incremental through to full cost, is dependent on the status of development access and are derived from Life of Mine costs: Development COV (US\$/t ore): ATE=20, MGD=20, SOT=18 Incremental COV (US\$/t ore): ATE=55, MGD=53, SOT=49 Opex COV (US\$/t ore): ATE=68, MGD=67, SOT=65 Opex+Capex COV (US\$/t ore): ATE=77, MGD=74, SOT=73 		



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Mining Factors or assumptions

The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).

The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.

The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and preproduction drilling.

The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).

The mining dilution factors used.

The mining recovery factors used.

Any minimum mining widths used.

The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.

The infrastructure requirements of the selected mining methods

Comment

- The Ore Reserve has been estimated using accepted industry practices for underground mines including stope optimisation analysis (Deswik), mine design, mine scheduling and the development of a cash flow model incorporating the Company's technical and economic projections for the mine for the duration of the Life of Mine Plan ("LoMP").
- The primary underground mining method approach at the three mines is sub-level long-hole open stoping ("LHOS") with transverse and longitudinal orientation depending on orebody thickness. Stope voids at Aguas Teñidas and Magdalena are backfilled with paste fill. Sotiel uses a combination of unconsolidated development waste and cemented rock fill ("CRF"). Drift and Fill ("D&F) mining is planned in a small zone of the Aguas Teñidas orebody around and above previously mined out stopes. The mining methods selected are considered appropriate for the respective mines and orebodies.
- Stopes to be mined in the short term are assessed on an individual basis using all related local mining, geological and geotechnical experience to date. This includes data gathered from back-analysis of stopes mined to date in adjacent or similar areas. Stopes to be mined in the medium to long term employ geotechnical parameters derived from area mining experience and / or diamond drill core.
- The 30 June 2023 Mineral Resource models were used as the basis for stope and development design. No modifications were made to this model for mine design purposes apart from the addition of block NSR value estimates.
- Ore Reserves have been estimated by generating detailed mining shapes for all areas that contain Measured or Indicated Mineral Resources as well as access development. Internal stope dilution has been designed into the mining shapes and interrogated. External stope dilution and mining recovery factors have been applied post geological block model interrogation to generate final mining diluted and recovered ore tonnage and grade. External dilution and mining recovery factors:
 - External dilution:

Aguas Teñidas (%): 12

Magdalena (%): 12, MG1 8

Sotiel (%): SCL 18, SEL 12, SOM 18, SOE 14

Mining Recovery:

Aguas Teñidas (%): 93, ATE and ADF 50, ADF LH and AOM 90

Magdalena (%): 93Sotiel (%): 94

- A minimum mining width of 4.0 m is used based on the nature of the deposits and the equipment fleet employed.
- Ore Reserves contain approximately 134kt of Inferred Mineral Resource which equates to 0.4% of the reported total. Economic impact is considered negligible.



JORC Code Assessment Criteria	Comment		
		The operating mines at MATSA have all the required infrastructure in place that is required to service the selected mining methods.	
Metallurgical factors or assumptions		MATSA has a central processing facility located at Aguas Teñidas that treats ore from all three mines	
The metallurgical process proposed and the appropriateness of that process to the style of mineralization. Whether the metallurgical process is well-tested technology or novel in nature.		and has a nominal capacity of 4.7Mtpa. It comprises two processing plants which contain two crushing lines and three processing lines that produce copper, zinc and lead concentrates that are blended on-site prior to transport to the port of Huelva. The processing lines have been designed to process both Cupriferous and Polymetallic ores and can be reconfigured depending on ore availability and blend. Cupriferous is defined as Zn<2.5% and Cu/Zn>1.7 with the remainder defined as Polymetallic. The metallurgical process is well tested technology.	
The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors		The metallurgy is well understood at MATSA with projected process recoveries based on the Ore Reserve mine schedule and empirical models. Process plant recoveries are estimated from material type grade recovery curves and applied by mine, material type and concentrate product:	
applied.		 Polymetallic: Aguas Teñidas and Magdalena – Zn (67-83%), Cu (50-79%), Pb (25-50%) 	
Any assumptions or allowances made for deleterious		 Polymetallic: Sotiel – Zn (57-71%), Cu (40-75%), Pb (25-36%) 	
elements.		 Copper: Aguas Teñidas, Magdalena, Sotiel – Cu (83-92%) 	
		 Copper stockwork: Aguas Teñidas and Magdalena – Cu (85-92%) 	
The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.		Deleterious elements are accounted for by a combination of onsite ore blending and concentrate blending to maximise concentrate value.	
For minerals that are defined by a specification, has the Ore Reserve estimation been based on the appropriate mineralogy to meet the specifications?			
Environmental	•	Approvals have been granted for the raising of the existing Tailings Management Facility (TMF) from	
The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status		1320 R.L. to 1324 R.L. Construction has commenced and due for completion in H2 CY23. Closure of this TMF is scheduled to occur in CY26. Closure design and permitting is scheduled to commence Q4CY23.	
of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.		Planning for a replacement TMF is underway with permit applications in progress. Phased construction to mitigate transition risk is scheduled to occur late CY24 and through CY25 with operation scheduled to align with the closure of the current TMF.	
Infrastructure	•	MATSA has been operating for several years and as such the infrastructure required to facilitate mining	
The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or		and processing operations are in place and fit for current purposes. Planned replacement of equipment to sustain operations is considered and captured under the mine capital plan.	



JORC Code Assessment Criteria	Comment
the ease with which the infrastructure can be provided or accessed.	 The power generation mix and supply in Spain is such that power supply is considered low risk. MATSA have entered into long-term power contracts that provide multi-year access to fixed price, carbon emissions free energy. MATSA are also assessing medium and longer-term renewable energy initiatives.
The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government	 Capital costs are generally limited to that required to sustain the operation and are based on current contracts and quotes and forward projections. Operating costs are based on historical averages, current contracts, and forward projections. Current offtake agreements for copper, zinc and lead concentrates provide the basis for downstream cost estimation. Exchange rates are based on consensus forecasts and vary over the life of the mine. Land freight is based on existing contracts and forward projections. No royalties are payable.
Revenue Factors The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products	 Commodity prices are based on consensus forecasts and vary over the life of the Ore Reserve. The life-of-mine average values are: Copper (US\$/t): 8,282 Zinc (US\$/t): 2,583 Lead (US\$/t): 1,909 Silver (US\$/oz): 20.5 The exchange rate is based on consensus forecasts and vary over the life of the Ore Reserve. The life-of-mine average value is: EUR/USD: 1.16 Current offtake agreements for copper, zinc and lead concentrates provide the basis for revenue factor derivation.



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Market assessment The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	 MATSA has life of mine offtake agreements for the sale of copper, zinc and lead concentrates. Pricing is fundamentally on value of contained metals the main metals being copper and zinc and lead and silver credits. The price of copper, zinc and lead being set based on the LME which is a mature, well established and publicly traded exchange. Independent expert publications (CRU, Wood Mac, Metal Bulletin) and other sources (bank reports, trader reports, conferences, other trade publications) are used to form a view about future demand and supply and the likely effects of this on both metal prices and concentrate prices. 		
The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	 MATSA is an operating mining complex with a focus on operating cash margins. The mine plan and schedule created specifically for the Ore Reserves provides positive cash margins in all years when modifying factors outlined are applied. NPV (7%) sensitivity analysis shows the Ore Reserve to be most sensitive to copper price and exchange rate followed by operating costs then zinc price. The project remains NPV positive with unfavourable individual movements up to 20% in each of the significant drivers. 		
Social The status of agreements with key stakeholders and matters leading to social licence to operate.	 MATSA is an operating mining complex, and all agreements are in place and are current with all key stakeholders. MATSA has a well-established framework to manage social responsibility. The framework encompasses MATSA employees, local communities and global society and trading partners. 		
Other To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical	 MATSA currently holds all key mining exploitation concessions and environmental permits for carrying out its business at the three operating mining sites, plant operations and supporting infrastructure for life of the Ore Reserve except for the above-mentioned TMF replacement which requires permitting. Diesel particle management strategies are under development to align with an EU directive that requires compliance by 2026. 		



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to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	Ore Reserves have been derived from a mine plan that is based on extracting the 30 June 2023
The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit.	Measured and Indicated Mineral Resources. Ore Reserves are initially derived from development and stope designs that are evaluated against Mineral Resources. Designs do not inherently honour mineral resource classification boundaries therefore designs contain multiple mineral resource classification material types. Proved Ore Reserves have been derived from designs that contain greater than 50% Measured Mineral Resources. Probable Ore Reserves have been derived from designs that contain greater than 50% Indicated Mineral Resources and less than 50% Measured Mineral Resources.
The proportion of Probable Ore Reserves that have been	 Probable Ore Reserves contain 2.9 Mt of Measured Mineral Resources.
derived from Measured Mineral Resources (if any).	 Final classification is set after considering all relevant modifying factors.
	 The underground Ore Reserve classification appropriately reflects the competent person's view of the deposit.
Audits or reviews	Ore Reserves have been compiled by MATSA and reviewed by Sandfire Technical Services.
The results of any audits or reviews of Ore Reserve estimates.	Gre regervee have been complied by Inverse and Toviewed by Canadia Toviewed.
Discussion of relative accuracy/ confidence	The Ore Reserve for MATSA has been estimated using accepted industry practices for underground
Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 mines, including stope optimisation analysis (Deswik), mine design, mine scheduling and the development of a cash flow model incorporating the Company's technical and economic projections for the mine for the life of the Ore Reserve. There has been an appropriate level of consideration given to all modifying factors, which are established from established operating mines, to support the declaration and classification of Ore Reserves. Ore Reserves with a lower NSR unit value are more sensitive to changes in the main economic parameters therefore have a higher ore reserve risk.
The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic	



JORC Code Assessment Criteria	Comment
evaluation. Documentation should include assumptions made and the procedures used.	
Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	